REMARKS

Applicants note with appreciation the indication of allowable subject matter. The present amendment is believed to be effective to resolve all issues raised in the outstanding Official Action.

On page 2 of the Examiner's Official Action, the description given of the Griggs (5,957,122) reference is that the fluid inlet 63 overlies the axis of rotation, and the housing structure comprises a cylindrical portion (30A & 30B) with end portions (46A & 46B). However, applicant's view of components 46A & 46B is that they are mere add-ons to the housing which Griggs himself calls bearing plates. What is clear is that Griggs, for his choice of housing construction, employs such bearing plates to locate the seal and bearing for the drive shaft. This is true of all the Griggs' embodiments including Fig. 7 which shows bearing 48' and mechanical seal 52' mounted to the exterior end wall 90'.

With regard to the present invention, it is to be preferred for the fluid entering into the device to be at the same elevation and co-axial direction as the rotational axis of the rotor. The incoming fluid has the advantage of being given greater impetus by the revolving rotor as it enters the chamber nearer to the center, to be thrown outwardly from the center in a generally radial direction before being redirected by the housing interior towards entering the annular fluid volume. This is also

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Figure 5. This sheet, which includes Figures 2 and 5, replaces the original sheet including Figures 2 and 5. In Fig. 5, the reference numeral "33i" has been amended to --13i--.

useful for cooling the bearing cool on this side of the rotor, and may also be used when appropriate, to save the expense and complication of providing an additional fluid seal at this end of the device.

With regards to claim 13, this claim has been amended to include the limitation of cancelled claim 16. The advantage of circumferentially displacing alternate rows along the axial length of a rotor is that it produces more fluid turbulence by the resulting clustered pattern of holes in a given size of rotor.

While undoubtedly the Griggs' machine has been shown to work well using relatively short depth radial holes, the desirability of investigating deeper drilled holes, especially of varying depths and range of resonant frequencies, has apparently been overlooked. Angling the respective longitudinal axes of the holes in a rotor, for example, such that they point either towards or away from the direction of rotor rotation, as mentioned in the specification of the present invention with reference to the use of swept wings in field of aeronautics, is useful for the creation of an alternative pattern of fluid behavior to suit specialized applications.

Applicant also notes for the record that the term "annular fluid volume" as used in the present claims is intended to embrace not only embodiments of the invention wherein the confronting rotor and housing surfaces are cylindrical, but also,

and without limitation, embodiments of the invention wherein the surfaces are conical, as shown for example in Figure 21, and including also embodiments wherein the angle of inclination is different for the rotor generatrix than for the housing, such that the radial extent of the annular fluid volume is not constant.

The Examiner is also respectfully reminded that applicant is still awaiting receipt of the initialed Form PTO-1449 in connection with the Supplemental Information Disclosure Statement filed May 28, 2004, which was requested by the paper filed September 8, 2004. Therefore, the Examiner is asked to provide an initialed photocopy of that citation form with the next official communication.

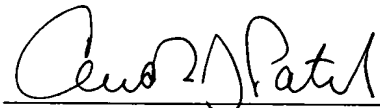
From the above discussion, therefore, it is believed to be apparent that the application is now in condition for allowance with claims 1-13, 17-26, and 29-47, as amended. Allowance and passage on that basis are accordingly respectfully requested.

Please charge the fee of $550 for the one extra independent claim and seven claims of any type added to Deposit Account No. 25-0120.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



Andrew J. Patch, Reg. No. 32,925
745 South 23rd Street
Arlington, VA 22202
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

AJP/lrs

APPENDIX:

The Appendix includes the following item:

- replacement drawing sheet